

ABSTRACT

An image reading apparatus includes a casing (1), an input member (2) having an input surface, a rotary member (3) formed of a transparent base material, a light source (4), a light detecting means (5) having a plurality of photoelectric conversion elements, and a signal processing means (8), wherein partial images obtained from light emitted from the light source toward the input surface and reflected by troughs of a finger (6) in contact with the input surface, and a light-dark pattern provided on the surface of one end portion of the rotary member adapted to rotate while in contact with the finger, are successively detected, whereby a whole image of a fingerprint is synthesized from the partial images by the signal processing means (8). Further, the light source and the light detecting means are arranged such that, in addition to the reflected light obtained from the input surface, scattered light is also detected, whereby it is also possible to read a planar image having light and shade like that of an original. Further, by outputting the rotating amount of the rotary member, it is also possible to effect a position input in accordance with the movement amount of the finger (6).